



Chatham Fire Department

“Organizational Analysis”



Our Goal:

To create a report that becomes a useful guide and a resource that shapes a vision for the success of the organization as it approaches the challenges and transitions of the future.



Dust Collector or Useful Tool? What are the Outcomes?

**This analysis
provides the
organization and
the community 58
recommendations
that should be used
as a tool to guide
you, in reality the
outcome is up to
you.**





Methodology

- **Data Review**
- **Direct Interview**
- **Observation**
- **Touring the Community**
- **Fire Station Location Analysis**
- **Response Time Verification Trails**
- **Literature Review**
- **Target hazard Analysis**
- **Public Comment**
- **Insurance Services Office Fire Protection Grading**
- **NFPA Standard 1710 + OSHA 2 in 2 out**
- **Met with Area Fire Chiefs**
- **Reviewed Federal Grants**



The Report

- **Recommendations timed and spaced to match the fiscal ability of the community.**
- **Emphasis should be placed Upon:**
 - Response times;
 - Operational safety;
 - Staffing;
 - Infrastructure planning;
 - Customer Service;
 - Fire Prevention and
 - Public Safety Dispatching



Our Observations

- **Excellent Department – based on the strength of its people.**
- **Ingenuity, creativity and pride of are evident.**





Our Observations

- **Provides a tremendous level of value to the community.**
- **Now is the time to invest, and plan for a healthy future.**



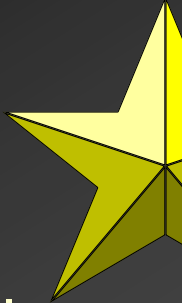


Our Observations

- Significant needs exist
- Facility issues are paramount
- The time tested attitude of “do what is necessary” presents safety issues.



12 Focus Areas

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- I. Fire Service Facilities
 - II. Fire Service Equipment
 - III. Capital Planning
 - IV. Deployment of Resources
 - V. Staffing and Re-Call of Personnel
 - VI. Community Input
 - VII. Emergency Medical Services
 - VIII. Grants
 - IX. Dispatch Operations
 - X. Emergency Incident Volume Analysis
 - XI. Benchmarking – Comparative Analysis
 - XII. Insurance Service Office (ISO) Grading



Top Five Challenges

- 1. Deciding upon an acceptable level of risk for the community as it pertains to fire, rescue and emergency medical services.***
- 2. Adopting a long-range capital plan that includes the construction and operation of two fire stations.***



Top Five Challenges

- 3. *Adopting a reasonable capital plan for fire service apparatus and equipment.***
- 4. *Balance Fire Department staffing among career and call personnel.***
- 5. *Determine an appropriate model for dispatching public safety services.***





Top Five Recommendations

- 1. A temporary substation should be created and staffed with a minimum of two personnel at the new water treatment facility. Unless interior space can be reconfigured a trailer should be brought on site to provide living quarters for personnel at this location. This facility should be utilized until a new South Chatham substation can be designed and constructed.***





Top Five Recommendations

2. Redesign and downsize the headquarters station to consider the implementation of a two-station response model. Based on the intensity of this need, if a Town Meeting has not been scheduled, a Special Town Meeting should be called to fund the redesign and construction of this project.



Top Five Recommendations

- 3. *Fill the two vacant firefighter positions and seek federal grants to assist with career and call firefighter staffing of a two fire station model and to control overtime costs.***
- 4. *Dispatch operations should be transferred to a regional center and the firefighter that presently performs dispatch duties be reassigned to emergency response as rapidly as possible.***



Top Five Recommendations

- 5. *Purchase a “quint” fire apparatus (pumper and aerial combination) and seek a new pumper through a federal FIRE Act grant.***





Fire Service Facilities

- **Recommendation I.1** – *Dispatch operations should be transferred to a regional center and the firefighter that presently performs dispatch duties be reassigned to emergency response as rapidly as possible.*





Fire Service Facilities

- **Recommendation 1.2** – *A temporary substation should be created and staffed with a minimum of two personnel at the new water treatment facility. Unless interior space can be reconfigured a trailer should be brought on site to provide living quarters for personnel at this location. This facility should be utilized until a new South Chatham substation can be designed and constructed.*





Fire Service Facilities

- **Recommendation I.3** – *Redesign and downsize the headquarters station to consider the implementation of a two-station response model. Based on the intensity of this need, if a Town Meeting has not been scheduled a Special Town Meeting should be called to fund the redesign and construction of this project.*





Fire Service Facilities

- **Recommendation 1.4** – *Funding for the construction of a permanent substation on the lot at Main Street and Meetinghouse Road should be brought to the Fiscal 2013 Town Meeting.*





Fire Service Equipment

Recommendations pertinent to this section of the report have combined with, and, are contained under the Capital Planning section of this report.





Capital Planning

- **Recommendation III.1** – Consolidate the replacement of the 1986 fire pumper with the request for an aerial ladder. Purchase a “quint” unit that has a 75 - 80’ aerial ladder and is configured as a fire pumper in Fiscal 2013.





Capital Planning

- **Recommendation III.5** – *Replace the 1989 fire pumper/tanker in 2014 after 24 years of service.*





Capital Planning

- **Recommendation III.4** – *Adjust the amount request for several projects to be fiscally realistic in terms of ability to accomplish the project goal.*
- **Recommendation III.6** – *Eliminate projects that do not meet the definition typically utilized in the public sector for capital projects. These projects should be funded through an adjustment within the Fire Department Capital budget.*





Deployment of Resources

- **Recommendation I.1** – *Dispatch operations should be transferred to a regional center and the firefighter that presently performs dispatch duties be reassigned to emergency response as rapidly as possible.*





Deployment of Resources

- **Recommendation IV.1** – Hire two firefighter paramedics to bring the number of personnel assigned to each shift to six members.
- **Recommendation IV.2** – Set the minimum shift strength at a level of six personnel during the peak summer season and at a level of five personnel during the remainder of the year.





Deployment of Resources

- **Recommendation IV.3** – *In 2011 apply for a Federal SAFER Grant to hire four firefighter paramedics.*
- **Recommendation IV.4** – *If the SAFER Grant is awarded raise the minimum staffing to a level of six personnel year round and set the assigned shift strength at a level of seven personnel.*





Deployment of Resources

- **Recommendation IV.9** - *Formal training of some type, lasting a minimum of one hour, should be mandated to take place on every duty day on every platoon. If necessary, personnel can swap off response assignments for training purposes to insure, as much as possible, that all personnel get to complete the training.*





Deployment of Resources

- **Recommendation IV.10** - *Additional, high intensity training on various subjects, including periodic live fire training, should be conducted on at least a semiannual basis (with quarterly being preferred), off duty at a formal fire academy where appropriate training facilities, structures and props are available. This training should be mandatory for all personnel.*





Staffing & Recall of Personnel

- **Recommendation IV.6** – *Impact bargain the reduction of recall to maintain the availability of four personnel (OSHA Two in Two out) for secondary responses.*





Staffing & Recall of Personnel

- **Recommendation V.1** – Set a realistic goal of expanding the number of on-call personnel to a level of 12 over three years.
- **Recommendation V.2** – In Fiscal 2012, apply for a Federal SAFER Grant for on-call recruitment and retention. This grant should be utilized to develop a marketing program, and provide incentives to on-call personnel such as **tuition reimbursement**.



Community Input

- ***Based on the public meetings that we conducted three clear themes emerged:***
 - ***The community as a whole supports the department;***
 - ***The public does not want to see the level of service diminished;***
 - ***The citizens present indicated they are willing to pay more for reasonable increases in service level.***





Emergency Medical Services

- **Recommendation VII.1** – *Evaluate the need for the third EMT on all transports to a medical control facility. Return this 3rd person back to a fire station for situations determined to be non-critical by the Medical Director. This will create more availability to staff simultaneous calls quicker and at less expense.*





Emergency Medical Services

- **Recommendation VII.2** – *If available, a third EMT should respond to all medical calls to assist the ambulance crew with logistics and lifting thus preventing back injuries. This firefighter should remain in service and available to respond to other calls unless the patient's condition warrants an extra attendant as outlined above.*





Emergency Medical Services



- **Recommendation VII.5** – *The Town should consider adjusting ambulance-billing rates to a level of Medicare plus 75%.*



Fire Service Grant Analysis

- **Recommendation VIII.1** – Seek external assistance in the development of Federal FireAct and SAFER Grant Applications.





Dispatch Operations

- **Recommendation IX.2** - *The Town of Chatham should seriously consider transferring fire, rescue and emergency medical service dispatch operations from the Chatham Fire Department to the Barnstable County Sheriff's Office Dispatch Center as soon as funding can be appropriated for start-up costs and necessary contracts and agreements can be developed and executed*





Dispatch Operations

- **Recommendation IX.3** - *If the study currently being conducted by Barnstable County for the Barnstable County Fire Chiefs Association determines that a dedicated, county wide fire, rescue and EMS dispatch center is feasible and warranted, and, appropriate start up grant funding is obtained, the Town of Chatham should give serious consideration to participation in that endeavor from its inception.*





Dispatch Operations

- **Recommendation IX.4** - *If the Town of Chatham decides to move fire, rescue and EMS dispatch operations to another agency, the minimum number of on duty firefighters **SHOULD NOT** be reduced and should be maintained at the current five (5) off season and six (6) in season.*





Dispatch Operations

- **Recommendation IX.7** - *Once fire, rescue and EMS dispatch operations are transferred from the Chatham Fire Department to another appropriate agency, the Chatham Fire Department procedure on paging/recalling off duty personnel should be revised to reflect the availability of an additional on duty firefighter for immediate response, and, reduce the circumstances/ instances when additional off duty personnel are summoned, on overtime, to assist with providing station coverage*



Emergency Incident Volume Analysis



TOTAL ANNUAL RESPONSES BY YEAR
2005 - 2010

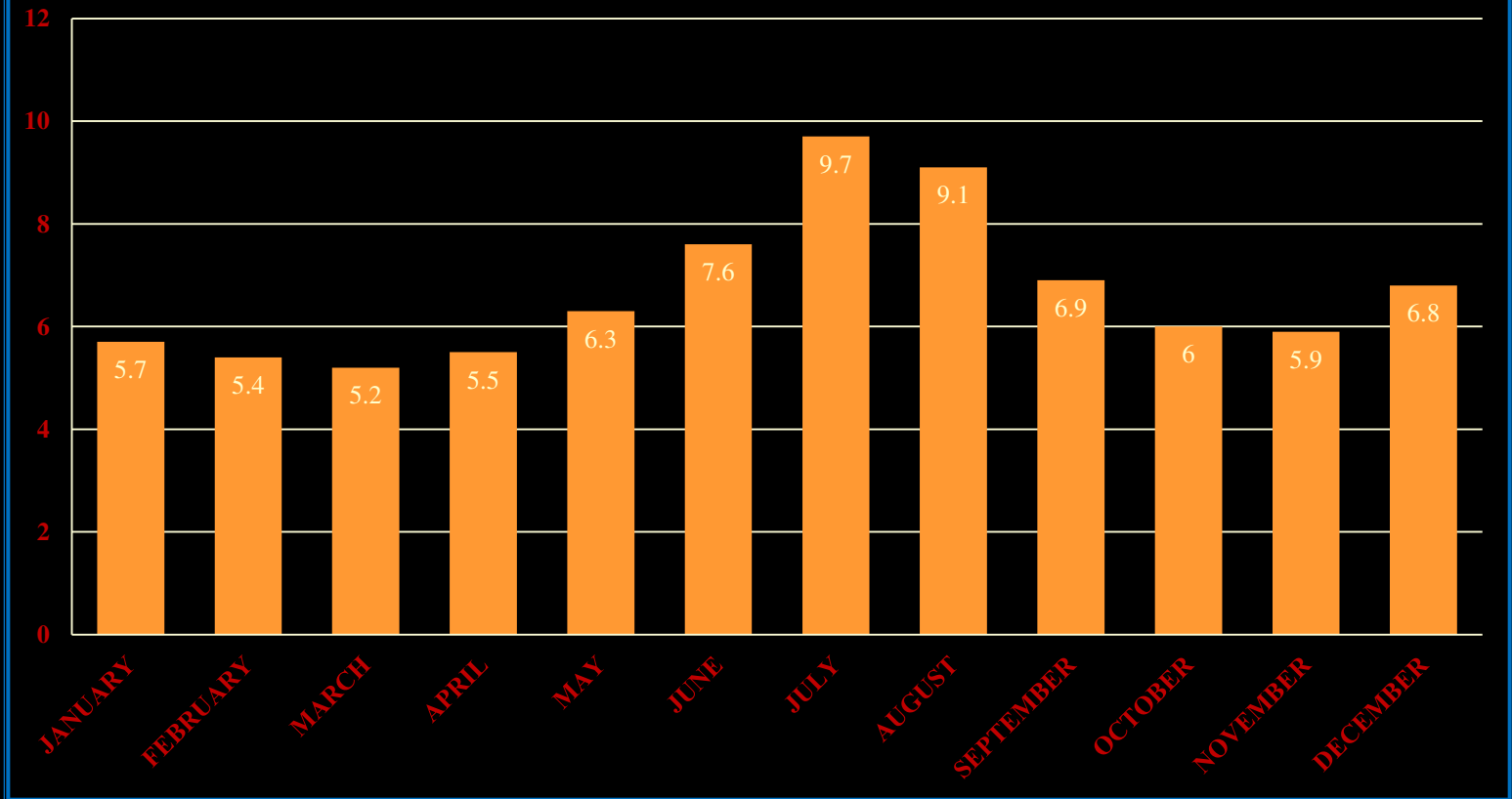




Emergency Incident Volume Analysis

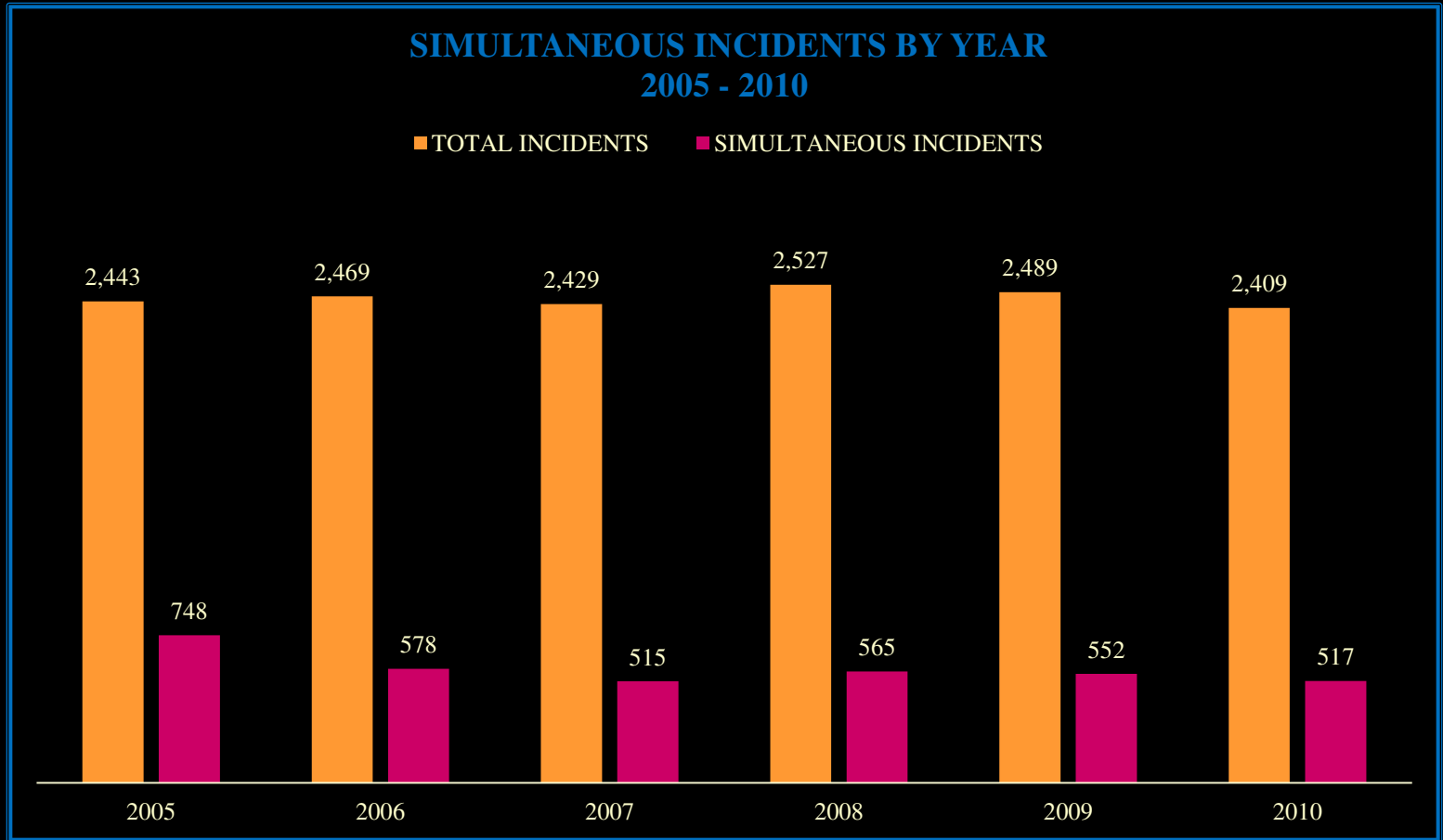


AVERAGE NUMBER OF DAILY RESPONSES BY MONTH
2005 - 2010





Emergency Incident Volume Analysis





Emergency Incident Volume Analysis

12/1/09 to 11/30/10

- 2, 107 incidents where there was a recordable response time.
 - 1431 (67.9%) has a response time of five (5) minutes or under (including one (1) minute turnout time);
 - 1649 (78.2%) had a response time of six (6) minutes or less;
 - 1831 (86.9%) have a time of seven (7) minutes or less;
 - 1950 (92.5%) have a response time of eight (8) minutes or less.
- The average response time, including the station walk-in emergencies was 3 minutes, 49 seconds.



Emergency Incident Volume Analysis

**TARGET IS 5 MINUTE RESPONSE
TIME 90% OF THE TIME.**





Benchmarking & Comparative Analysis

- *Chatham is composed of a smaller permanent resident population and overall land area than the majority of the communities surveyed.*
- *The fire services budget is 11% above the average and overtime is 57% above average.*
- *Fire dollar loss is below average and overall emergency incident volume is average*



Benchmarking & Comparative Analysis

- *The number of career firefighters is slightly below average, while the number of on-call firefighters is significantly below average.*
- *The number of walk-in medical treatments (a community expectation) is 2.5 times the average experienced in other communities. Many of these events do not result in patient transport. Although not a revenue generator, this service is publically viewed as an exceptional service.*





Benchmarking & Comparative Analysis

- *Most communities operate more than one fire station. The average size of the headquarters fire station is 18,592 square feet.*
- *Emergency medical services revenue is lower than the average but based on the distance to Cape Cod Hospital, then per call revenue is higher than average.*





Benchmarking & Comparative Analysis

- **Recommendation XI.1** – Overtime should be reduced by restructuring recall procedures and optimizing shift float thus decreasing the need to hire personnel on overtime.
- **Recommendation XI.2** – The Department should be recognized for doing an exceptional job in limiting fire dollar loss within the community.





ISO Grading

- In the last ISO evaluation, Chatham received a class 5 rating and an overall score of 53.41.
 - **FIRE ALARMS/ COMMUNICATION:**
8.30 out of 10
 - **FIRE DEPARTMENT**
20.07 out of 50
 - **WATER SUPPLY**
34.02 out of 40



ISO Grading

- **Recommendation XII.1** - *Alter response patterns to dispatch two units to an alarm of fire in a structure.*
- **Recommendation XII.2** - *Conduct hose testing on an annual basis and maintain appropriate records.*





ISO Grading

- **Recommendation XII.3** - Record all emergency telephone lines even if the dispatch center is relocated. As the present recorder does not fully function this unit should be replaced immediately, a new unit could be easily transferred into the new headquarters once construction is complete.





The Challenge Ahead, Planning for the Future

- Long term development of the organization and your people
- Matching needs to fiscal ability
- Master planning





Thank You



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